

ABSTRACT

Coated inflatable fabrics, more particularly airbags to which very low add-on amounts of coating have been applied, are provided which exhibit extremely low air permeability. The inventive inflatable fabrics are primarily for use in automotive restraint cushions that require low permeability characteristics (such as side curtain airbags). Traditionally, heavy, and thus expensive, coatings of compounds such as neoprene, silicones and the like, have been utilized to provide such required low permeability. The inventive fabric utilizes an inexpensive, very thin coating to provide such necessarily low permeability levels. Thus, the inventive coated inflatable airbag comprises a film laminated on at least a portion of the target fabric surface wherein the film possesses a tensile strength of at least 2,000 and an elongation at break of at least 180%. The film provides a low permeability airbag cushion exhibiting a leak-down time of at least 5 seconds wherein the film is present on the surface in an amount of at most 2.5 ounces per square yard of the fabric.